

CLAIMS

I claim:

5
Sub
a/

1. A method for arranging the maintenance of a production plant such as a paper mill, board mill, pulp production plant, paper finishing plant and the like installation related to the manufacture/conversion of paper/board, wherein the method comprises the steps of:

10 gathering information related to the manufacturing processes and machinery of a production plant by means of at least one information system and/or measurement unit and/or production control unit;

connecting a service system server to a local information network of the production plant;

collecting information to the service system server from different information systems of the production plant;

15 sending the collected information from the production plant to a remote service unit, wherein the information submitted from at least one production plant is collected and analyzed;

isolating the internal information network of the production plant from the Internet by a firewall;

20 isolating the information network of the service unit from the Internet by a firewall; and

transferring the information bidirectionally via the firewalls between the information network of the production plant and the information network of the service unit in a secured format.

25 2. The method of claim 1 wherein the service system server is located within the confines of a firewall of the local information network of the production plant.

3. The method of claim 1 wherein in the service system server the gathered data is treated and processed into a format essentially needed in servicing operations.

4. The method of claim 1 wherein authorized users in the service unit and the production plant are identified by the IP addresses of the computers between which the communications connection is to be established and/or by ID codes and/or passwords of the computer operators.

5. The method of claim 1 wherein the service unit is located geographically remote from the production plant.

6. The method of claim 1 wherein information is collected to the service unit from a plurality of production plants.

7. The method of claim 1 wherein the service system server sends information to the service unit in a standard format.

8. The method of claim 1 wherein information submitted from the production plant is analyzed in the service unit.

9. The method of claim 1 wherein operational recommendations are sent from the service unit to the production plant.

10. The method of claim 1 wherein information analyzed in the service unit is utilized for determining the timing of scheduled maintenance in the units of the production plant.

11. The method of claim 1 wherein data, video and/or audio signals are transferred between the production plant and the service unit .

12. A system for arranging the maintenance of a production plant related to the manufacture/conversion of paper/board, wherein the system includes in said production plant information systems, wherefrom information is transferred to a service system server and further includes a service unit comprising a data analysis unit and a data bank, and in which system between said production plant and said service unit is established a secured communications connection comprising a firewall of said production plant, a firewall of the service unit and a secured communications connection therebetween.

13. The system of claim 12 wherein the service system server is integrated into the information network of the production plant.

14. The system of claim 12 wherein the service system server is located within the confines of a firewall of said local information network of the production plant.

15. The system of claim 12 wherein the service system server is arranged to treat and process the gathered data into a format essentially needed in servicing operations.

16. The system of claim 12 wherein the service unit operates over a secured communications connection with at least one production plant, each said production plant being isolated from the Internet by a firewall.

17. The system of claim 12 wherein the service unit data analysis unit performs data processing and analysis, and wherein the data bank is connected to the data analysis unit for data storage.

18. The system of any claim 12 wherein the data bank of the service unit is provided with a www interface for browsing of information.

19. A method for servicing a production plant selected from the group consisting of a paper mill, a board mill, a pulp production plant, and a paper finishing plant; comprising the steps of:

- 5 gathering information related to manufacturing processes and machinery of the production plant by at least one information system, measurement unit, or production control unit;
- connecting a service system server to a local information network of the production plant;
- inputting said gathered information to the service system server;
- 10 sending said input gathered information from the production plant to a remote service unit, wherein the information submitted from the production plant is collected and analyzed;
- isolating said local information network of the production plant from the Internet by a firewall;
- 15 isolating the information network of the service unit from the Internet by a firewall; and
- transferring the information bidirectionally via the firewalls between the local information network of the production plant and the information network of the service unit in a secured format.

add
as